# APPENDIX F ROUTE SELECTION PROCESS (MAY 6 AND 7, 2008)

#### Introduction

POWER and NorthWestern conducted a workshop with the resource team to discuss issues and make tradeoffs to determine an environmentally preferred route. This process was then considered by NorthWestern to select their preferred route in Montana for the Major Facility Siting Act application and EIS process, and in Idaho for the Federal environmental review. POWER facilitated the workshop, which used a consensus-building technique commonly referred to as a multi-attribute decision analysis.

The process has three steps, and these steps took two days to complete:

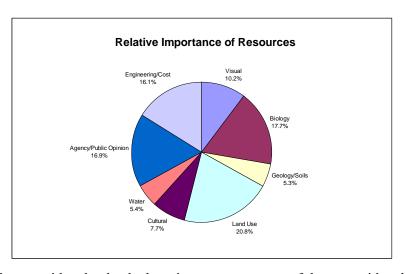
- Round Table discussion
- Resource Importance
- Ranking and Defense

There were a total of eight principal investigators involved in the workshop representing engineering, environmental, and land use disciplines. Another eight people attended the meeting to assist the principal investigators.

#### **Multi-Attribute Decision Process**

The round table discussion is the first opportunity for the principal investigators to tell the team about the most important issues on the various alternatives, put their resources in context, and to describe impact locations. This established a common understanding of the importance of the resource as stated by the expert on the team.

The subsequent step was a process of establishing the relative importance of each resource. The team was given



instructions to write down what they considered to be the least important resource of those considered for this project. Above that they listed the most important resource, and quantified how many more times important the most important is compared to the least important. Then the remaining resources were filled in with a quantification of their relative importance on the scale chosen specifically by each principal investigator. The weights were then normalized to put all of the weights onto an equal scale. The pie chart above of the combined results was displayed for reference during the remainder of the workshop.

The final step is to rank alternatives routes, but this consisted of two parts and the bulk of the duration of the two days. The first part is to identify localized alternatives that have common endpoints. We term these subroutes. The subroute sets are identified and the data compared for each subroute. The process involved significant discussion of tradeoffs in these local areas and issues, however the group was able to reach consensus on the subroutes after lengthy discussion of impacts and agency concerns.

Once preferred subroutes were selected, it was possible to assemble the remaining link segments into end-to-end routes, and this was done for the two major segments of the project:

- The Proposed Townsend Substation to the Mill Creek Substation
- The Mill Creek Substation to the Midpoint Substation in southern Idaho

End-to-end routes were then compared for each of the eight selection criteria. The eight principal investigators then ranked each of the routes in order of preference, and those preferences were displayed for the entire team to view, and then defense of rankings was done by each. This discussion lasted a couple of hours, and this was the end of the first round of ranking. The process works by forcing each principal investigator to defend their criteria (or resource discipline), with the desired result of moving the team towards understanding what the needed tradeoffs would be.

The second round of ranking was then completed to see if the rankings moved closer towards consensus, and in this case they did. In this round the group closed ranks enough that NorthWestern and the POWER project manager were satisfied with knowing the environmental route preference.

## **Environmentally Preferred Route**

The preferred route was identified on a map at the meeting, and consisted of a route that parallels the Colstrip line briefly coming out to the west of the proposed station at Townsend, departing from the corridor and heading southwest to cross the Boulder River just north of I-90, then traveling west along the existing 161kV and 230kV corridor to the area south of Butte, then traveling straight west in an alignment suggested by Tom Ring, then north into Mill Creek parallel to the existing 230kV corridor. The route south from Mill Creek parallels existing 230kV line south all the way to the Idaho border crossing through the Medicine Lodge and Sheep Creek drainages on the west side of the Tendoy Mountains, then continuing south through the Idaho National Laboratory and south to the Aberdeen area to join the existing east – west transmission corridor on the south side of Craters of the Moon National Monument, then straight west along that existing corridor into the Midpoint Substation.

### NorthWestern's Preferred Route

NorthWestern representatives who participated and observed the route selection process took all of the information and process on selecting the environmentally preferred alternative into consideration with agency preference to determine the route that NorthWestern plans to propose in the MFSA application as the preferred route. This route is slightly different from the environmentally preferred route because it would parallel the existing 161kV and I-15 corridor south from Mill Creek into Idaho. From here the route would travel to the southwest and then south through the Idaho National Laboratory. From here the route is the same as that described above for the environmentally preferred route. The I-15 corridor is strongly preferred by the Federal agencies.